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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,465

09/30/2003

Soon Young Park

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7590

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EXAMINER

BRIGGS, NATHANAEL R

ART UNIT

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2871

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,465	<b>Applicant(s)</b> PARK ET AL.	
	<b>Examiner</b> NATHANAEL R. BRIGGS	<b>Art Unit</b> 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 5-14 and 19-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (US 2001/0052949) in view of Suzuki et al. (US 6,333,769).**

4. Regarding claim 1, Yamaguchi discloses a LCD device (see figures 52 and 53A, for instance), comprising: a substrate (1) of an in-plane switching LCD device ([0214]) having a display part and a non-display part; a gate line on the substrate (2); a data line (5, 19) crossing the gate line (2) while being insulated therefrom ([0037]), to define a pixel area (9); and at least one capacitor (10) in the non-display part and connected to at least one of the gate line, the common line and the data line ([0212]) for storing a remaining electric charge component in the display part and eliminating the stored electric charge component ([0213]): wherein the component is a remaining electric charge component in the display part not induced from the outside. However,

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Yamaguchi, although mentioning an IPS embodiment, does not expressly disclose a common line substantially parallel to the gate line.

5. Regarding claims 1 and 15, Suzuki discloses an IPS LCD (see figure 3, for instance), having a common line (50) substantially parallel to the gate line (3), and a data line (4) crossing the gate line (3) and common line (50) while being insulated therefrom.

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a common line parallel to the gate line as that of Suzuki in the LCD of Yamaguchi. The motivation for doing so would have been to use conventional IPS common line structure to obtain an LCD of increased image quality, as taught by Suzuki (column 1, lines 15-25; column 1, lines 59-67). Claims 1 and 15 are therefore unpatentable.

7. Regarding claims 2 and 16, Yamaguchi in view of Suzuki discloses the LCD device according to claims 1 and 15 (see Yamaguchi figures 52 and 53A; Suzuki figure 3, for instance), and Suzuki discloses the device further comprising: a common electrode (50A) in the display part of the substrate and connected to the common line (50); a thin film transistor (TFT) at a crossing area of the gate line (3) and the data line (4); a gate insulating film (column 5, lines 21-30) between the gate line (3) and the data line (4); a protective film (column 6, lines 12-19) on the gate insulating film for protecting the thin film transistor (TFT); and a pixel electrode (53) connected to the thin film transistor (TFT) to form a horizontal electric field with the common electrode (50A).

Claims 2 and 16 are therefore unpatentable.

8. Regarding claims 3 and 17, Yamaguchi in view of Suzuki the LCD device according to claims 2 and 16 (see Yamaguchi figures 52 and 53A; Suzuki figure 3, for instance), and Yamaguchi further discloses wherein the capacitor (10) includes: a first capacitor connected to at least one of the gate line (2; via 20) and the common line; and a second capacitor connected to the data line (19). Claims 3 and 17 are therefore unpatentable.

9. Regarding claims 4 and 18, Yamaguchi in view of Suzuki the LCD device according to claims 3 and 17 (see Yamaguchi figures 52 and 53A; Suzuki figure 3, for instance), and Yamaguchi further discloses the device further comprising: a first static electricity prevention means (20) in the non-display part of the substrate and connected to the first capacitor (10); and a second static electricity prevention means (20) in the non-display part of the substrate and connected to the second capacitor. Claims 4 and 18 are therefore unpatentable.

***Allowable Subject Matter***

10. Claims 5-14 and 19-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

12. Claims 5 and 19 recite an LCD device wherein the first capacitor includes: a first shorting bar connected to the first static electricity prevention means; at least one layer of insulating film on the first shorting bar; and a first dummy line to overlap the first

shorting bar on the at least one layer of insulating film. None of the prior art of record disclose the limitations, nor would it have been obvious to do so.

13. *Yamaguchi et al.* (US US 2001/0052949) disclose a first and second capacitor having a first and second static electricity prevention means. However, *Yamaguchi* does not disclose the first capacitor including a first shorting bar connected to the first static electricity prevention means; at least one layer of insulating film on the first shorting bar; or a first dummy line to overlap the first shorting bar on the at least one layer of insulating film, nor would it have been obvious to do so.

14. *Nishikawa* (US 5,686,976) discloses an LCD device having a first and second capacitor, wherein the first capacitor (IC1) includes a first shorting bar (30-1); at least one layer of insulating film (13) on the first shorting bar (30-1); and a first dummy line (SP1) to overlap the first shorting bar (30-1) on the at least one layer of insulating film (13). However, *Nishikawa* does not disclose a first or second static electricity prevention means connected to the first or second capacitors, wherein the first or second capacitors are connected to one of the gate or data lines, or wherein the device is an in-plane switching LCD (therefore, the common electrode is one the opposite substrate, and not parallel to the gate line on the same substrate); nor would it have been obvious to make such modifications.

15. Claims 10 and 24 recite an LCD device wherein the second capacitor includes: a second shorting bar connected to the second static electricity prevention means; at least one layer of insulating film on the second shorting bar; and a second dummy line

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to overlap the second shorting bar on the at least one layer of insulating film. None of the prior art of record disclose the limitations, nor would it have been obvious to do so.

16. *Yamaguchi et al.* (US US 2001/0052949) disclose a first and second capacitor having a first and second static electricity prevention means. However, *Yamaguchi* does not disclose the second capacitor including a second shorting bar connected to the second static electricity prevention means; at least one layer of insulating film on the second shorting bar; or a second dummy line to overlap the second shorting bar on the at least one layer of insulating film, nor would it have been obvious to do so.

17. *Nishikawa* (US 5,686,976) discloses an LCD device having a first and second capacitor, wherein the second capacitor (IC2) includes a second shorting bar (30-2); at least one layer of insulating film (13) on the second shorting bar (30-2); and a second dummy line (SP2) to overlap the first shorting bar (30-2) on the at least one layer of insulating film (13). However, *Nishikawa* does not disclose a first or second static electricity prevention means connected to the first or second capacitors, wherein the first or second capacitors are connected to one of the gate or data lines, or wherein the device is an in-plane switching LCD (therefore, the common electrode is one the opposite substrate, and not parallel to the gate line on the same substrate); nor would it have been obvious to make such modifications.

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHANAEL R. BRIGGS whose telephone number is (571)272-8992. The examiner can normally be reached on 9 AM - 5:30 PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathanael Briggs  
2/12/2008

/Andrew Schechter/  
Primary Examiner, Art Unit 2871